

# **A Guide to the WSDOT Construction Change Order Process**

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WSDOT

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INTRODUCTION

This Guide to the WSDOT Change Order Process is not meant to cover every conceivable change order scenario, but is intended as a guide to the basics of the process. Each change order is unique, but they all have certain things in common. All change orders are legal documents changing the contract. All change orders need to comply with “HQ Construction Office Change Order Review Criteria”, since this is a guide to the minimum requirements for change orders. The Change Order Checklist is required for all change orders, since this delineates the approval and execution authority required.

## Section I

### I. CONTRACTS AND CONTRACT CHANGES – GENERAL OVERVIEW

#### A. Contracts

#### B. Contract Changes

- Common Reasons for a Change
- Typical Flow of a Change Order

## I. CONTRACTS AND CONTRACT CHANGES – GENERAL OVERVIEW

### A. Contracts

In the administration of WSDOT construction contracts, we rely on the definition provided by Section 1-01.3 DEFINITIONS of the Standard Specifications, which states:

**“CONTRACT**

“The written agreement between the Contracting Agency and the Contractor. It describes, among other things:

1. What work will be done, and by when;
2. Who provides labor and materials; and
3. How Contractors will be paid.

The contract includes the contract (agreement) form, bidder’s completed proposal form, contract provisions, contract plans, standard specifications, standard plans, addenda, various certifications and affidavits, supplemental agreements, change orders, and subsurface boring logs (if any).”

The construction contract documents establish the rights and obligations of both the owner and the Contractor. The Contractor has an obligation to deliver the completed facility within the time specified, for the amount specified, and in accordance with the plans, specifications and special provisions of the contract. The contracting agency, in this case WSDOT, has an obligation to pay the Contractor upon satisfactory completion of the contract work, in accordance with the terms of the contract.

Section 1-04.2 of the Standard Specifications establishes the order of precedence of contract documents as:

1. Addenda
2. Proposal Form
3. Special Provisions
4. Contract Plans
5. Amendments to the Standard Specification
6. Standard Specification
7. Standard Plans

When making changes to a contract, remember that all the preceding documents are part of the contract, and that care must be taken to ensure that any changes made do not create unexpected conflicts between documents.

WSDOT’s right to make changes to the contract is detailed in section 1-04.4 of the Standard Specifications, CHANGES, as follows:

“The Engineer reserves the right to make, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project.”

When the need, as determined by WSDOT, to make a change to the contract arises during the performance of the contract, the change must be accomplished by means of a written order from the Engineer to the Contractor. Such a written order is as legally binding, on both parties, as the original contract; since it becomes part of the contract once it has been executed by the engineer and received by the Contractor. The Engineer can order changes orally when time is of the essence. However, oral change orders require the same levels of approval as any other change order, and must be followed with a written change order.

*(Note that change orders are included in the definition of a contract in Section 1-01.3)*

As stated in Section 1-04.5, of the Standard Specifications, PROCEDURE AND PROTEST BY THE CONTRACTOR:

“The Contractor accepts all requirements of a change order by: (1) endorsing it, (2) writing a separate acceptance, or (3) not protesting in the way this section provides.”

As mentioned above, if the Contractor disagrees with the terms or conditions of a change order, there are specific requirements that must be met in order to file a protest. Section 1-04.5 of the Standard Specification states that when he disagrees with a change order “...the Contractor shall:

- 1) Immediately give a signed written notice of protest to the Project Engineer before doing the work;
- 2) Supplement the written protest, within 15 calendar days, with a written statement providing the following:
  - a. The date of the protested order;
  - b. The nature and circumstances that caused the protest;
  - c. The contract provisions that support the protest;
  - d. The estimated dollar cost, if any, of the protested work and how that estimate was determined; and
  - e. An analysis of the progress schedule showing the schedule change or disruption if the Contractor is asserting a change or disruption; and
- 3) If the protest is continuing, the information required above, shall be supplemented as requested by the Project Engineer. The Contractor shall provide the Project Engineer, before final payment, a written statement of the actual adjustment requested.”

Any change order not protested by the Contractor in the prescribed manner, is considered full equitable adjustment for the work added or deleted, any adjustment to time, or any costs incurred.

## **B. Contract Changes**

Change orders are changes to a legal document (the contract) and are themselves legal documents. Once a change order is executed, it becomes part of the contract, and cannot be *un-executed*. The only way to make further modification to a contract is to process another change order.

The WSDOT change order process is designed to comply with the requirements of the Washington Federal-Aid Stewardship Agreement. This agreement (which may be viewed from the State Construction webpage) between WSDOT and FHWA, implements a process of program and project oversight and accountability, and lays out the respective roles of WSDOT and FHWA in providing stewardship for Federal-Aid Highway projects. Monitoring the change order process is part of the Stewardship Agreement.

Change orders may be initiated by WSDOT, the Contractor or both parties.

Contract changes have many causes. Among the most common are:

- Plan deficiency (errors or omissions)
- Design criteria changes
- Specification conflict or ambiguity
- Extra work or unanticipated need
- Contractor proposed change (material substitution, etc.)

A more detailed description of these causes is as follows:

- Plan deficiency (errors or omissions)

When details in the plans do not provide an accurate and adequate representation of the work to be accomplished, a change order will be required to detail the work and provide equitable compensation. Plan error can occur not only in describing how the work is to be done, but also in describing the physical environment in which the project is to be built. Leaving out certain features in the plans can completely change the work.

- Design criteria changes

Care should be taken to identify those changes that alter design criteria, since changes that alter design criteria must be discussed with, and concurrence obtained from, Region and Headquarters design staffs. This type of change may require a design report amendment, and on Federal Aid projects, may require FHWA concurrence.



- Specification conflict or ambiguity

If there is ambiguity in the specification or a contradiction between the specifications and other contract documents, the Contractor does not have a clear description of the work to be done. Ambiguity or contradiction lends itself to conflicting interpretations of what or how the work is to be done, measured, or paid.

- Extra work or unanticipated need

Extra work is required when the contract is lacking an item, or items, to complete an item of work as specified in the contract. For example, when there is not enough suitable on-site material to build an embankment, a new contract item for the required borrow would be added by change order to complete the work.

- Contractor proposed change (material substitution, etc.)

A Contractor proposed change usually occurs when the Contractor desires to modify the work method specified in the contract or to substitute materials for those specified in the contract. This might occur when the Contractor can provide an item that is functionally equivalent or superior to the specified item, but which does not meet contract specifications. When this occurs, it usually means that the Contractor has a less expensive method or material, and the change order may reflect this by providing a credit to WSDOT. WSDOT may also be entitled to any saving in time. If there is no windfall profit to the Contractor, a no-cost change order may be appropriate.

*Note: It is especially important that deleted or reduced contract items be checked against Condition of Award items. WSDOT has a commitment to FHWA regarding DBE participation requirements and any change to the Condition of Award work to be performed could affect funding.*

Change orders initiated by WSDOT may be:

1. A response to unexpected conditions, which should not be confused with "Changed Condition". Changed condition can only be determined by HQ Construction, and the Contractor must closely follow the requirements for notification as defined in Standard Specification 1-04.7. WSDOT will strictly enforce these requirements, especially if we could have mitigated the impacts had we been properly notified.
2. Correction of plan errors. As a rule of thumb, if there is an error in the plans, the correction, and the cost of correction, will be born by WSDOT.

3. Errors or other necessary modifications. These changes will usually be adopted by WSDOT as soon as they are recognized.

Changes initiated by the Contractor may be:

1. Repair procedures. This applies mostly to bridge work, but may be for roadway issues. If the repair includes a modification to the plan (modify placement of the re-steel, move a joint, etc.), a change order is required to document the change.
2. Material substitution. These changes often include a credit to WSDOT, however if the product or material is superior to that specified and there is a benefit to the State, it may be at no cost.
3. Work method change. If the Contractor proposes to alter the work method, as required in the contract, a change order will be necessary. Often this type of change order will involve a reduction in working days and may or may not involve a credit to WSDOT.
4. CRIP. When the Contractor proposes a Cost Reduction Incentive Proposal change order, there are strict requirements to be met. These requirements are described in Chapter VII of this manual and are described in detail in Chapter 1-2.4(1) of the Construction Manual.

Two of the most common change orders that may be initiated by either party are:

1. Settlement of disputes.
2. Price adjustments for increased or decreased quantities. The requirements for this type of change order are discussed in Chapter VII of this manual.

During the course of construction, a change might occur as follows:

- The need for a change arises.
- Change is identified and all options evaluated.
- Project Engineer obtains all change *concept* approvals required by change order checklist.
- Project Engineer prepares PS&E type documentation for the change, including an independent estimate to justify the cost and any new or revised plan sheets required to detail the work.
- Project Engineer meets with the Contractor to discuss the terms of the change and negotiate agreed pricing and time.
- The change is formalized with a change order.
- The change order is submitted to Region for review and/or execution, and Region sends to HQ for review and/or execution.
- Change order is executed and Contractor proceeds with change work.

Ideally, no change work is to be performed until the Project Engineer has an executed change order in hand. On rare occasions, an approval to proceed with the change work prior to issuance of an executed change order may be requested from the executing authority. This prior approval, which must be documented, may be appropriate if there is a cost/time benefit to WSDOT, or if it will mitigate a cost/time disadvantage to the Contractor.

If the change order process follows the flow as described above, the engineer should have few difficulties. Problems can, and do, occur when the engineer doesn't first obtain the required approvals or when he/she has not done a good job of preparing PS&E type documentation for the change. This is just as important as preparing the bid documents for the original contract. Having this written documentation when negotiating with the Contractor can minimize misunderstandings about the quantity or type of work expected of the Contractor, exactly what is to be included in the price for the work, how it will be measured and paid, or how long the work will take.

Misunderstandings, and problems arising from them, are not nearly so serious if change order work has not been performed prior to execution of the change order. If the change order process above is followed, there will be much less chance that things will go wrong in administering changes.

## Section II

### II. ENGINEERING THE CHANGE

(Answering the question, “What needs to be changed and why?”)

- A. Justify the Change
- B. Change Order Checklist
- C. Description of the Change
- D. Prepare a Plan
- E. Define Pay Items
- F. Estimate Cost
- G. CCIS, Change Order Tracking, and Backup Documentation

## II. ENGINEERING THE CHANGE

### A. Justify The Change

The first step in engineering the change is to establish the justification for the change. The engineer must establish that the issue under discussion is truly a change to the contract, not covered by any other item of contract work, or not made incidental to other contract items by Standard Specifications, addenda, special provision, or amendments, etc. It is WSDOT policy to make only necessary changes and forego elective changes. The Project Engineer must establish that there is a real need or added value to the change.

Once it has been determined that a change to the contract must occur, the Project Engineer should investigate all possible solutions to the problem. In many cases there is more than one possible corrective action that may be taken. It is the job of the Project Engineer to determine which action is the most efficient, effective, and in the best interest of the State. The Project Engineer may request help or advice from Region or HQ Construction personnel in making this determination, as well as input from the Contractor, i.e. impacts to other work, etc..

Once the best action is decided upon, the Project Engineer must prepare a plan for the change, assemble the pertinent specifications for the change, estimate how much the change is going to cost, how long it will take, and obtain the required approvals (as defined in the Change Order Checklist in the Construction Manual). Just as in the prebid state of the original contract, the engineer must prepare PS&E type documents for the changed portion of the contract. This is in order to give the Contractor a clear and complete idea of what the change work entails and allows the Contractor to estimate how much this changed work should cost. If these steps are followed, the Project Engineer should find it much easier to negotiate the change.

### B. Change Order Checklist

One thing that must not be overlooked is the completion of the change order checklist. The change order checklist is the mechanism for determining who must give approval for the change, as well as who is the executing authority for the change and, therefore, the change order checklist is required for all change orders, including minor changes. The change order checklist will also be used when requesting an approval to proceed with change work prior to the execution of the change order, since the executing authority is the only one authorized to issue such an approval.

### **C. Description Of The Change**

Putting the change order documentation together begins with preparing a complete description of the change. This should include:

- What is to be changed.
- Any restraints on how the work must be performed.
- The location of the change.
- Material and product specifications.
- Any time constraints that may be required.
- Any other considerations.

The description needs to be clear enough that the Contractor will understand exactly what work must be performed, what materials will be required, and what construction requirements must be met in order to complete the change work. If there are time constraints of the performance of the change work, this must be detailed as well.

### **D. Prepare A Plan**

In addition to a complete written description of the change, an illustrative plan may be required to provide supplemental details, which will clearly explain, illustrate, or delineate the work. This might be a sketch of a detail, a plan sheet from the original contract, modified to show the change work, or a new plan sheet that provides the details of the work.

### **E. Define Pay Items**

With a description of the change and a plan for the change, the Project Engineer can determine how the work under the contract has been affected, i.e., which contract items are affected and what new pay items, if any, must be created. Make sure that the change is being made to the correct group. All affected contract items must be checked against Condition of Award items, since increasing, reducing or deleting COA items requires Headquarters Construction Office approval and execution of the change order. Any new non-standard items needed must have a full description, a method of measurement, and a method of payment, similar to the Standard Specifications. If the new items are “standard items”, already covered in the Standard Specifications, this is not required.

When deleting or reducing contract items, pay particular attention to the dollar amounts remaining in the groups being affected by the change. Check contract documents to make sure that the items or groups were not deleted or reduced by addendum or previous change orders. You cannot take money from a group that no longer exists.

## **F. Estimate Cost**

An important step of this process is preparing the engineer's independent cost estimate for the change. This must be a truly independent estimate, and not just a reiteration of the Contractor's estimate. The Project Engineer will estimate the quantities for each of the items, modified or deleted contract items and new items, the unit price for each, and compute the total cost of the change. The engineer's independent estimate should be done prior to any negotiation with the Contractor.

Unit prices for new items may be estimated in one of several ways:

1. Using bid prices from recent contracts with similar work and similar quantities, (Unit Bid Analysis)
2. Using a time and materials estimate.
3. Means Cost Estimating Guide

The first method of estimating prices is common and easily understood. However, every effort must be taken to insure that the type and quantity of work used for the estimate is recent enough for prices to be current, and truly similar to the type of work and quantity to be performed as change work. It may also be appropriate to take geographic location into account, since the price for similar work may vary greatly from one area to the next. If the prices are not recent, the work is not really similar, or the quantities vary too much, the price may not be reflective of the actual change work, and will result in an inaccurate estimate.

Another means is by estimating the costs of labor, material, equipment, and overhead in a manner similar to Force Account computation. Quotes may be solicited from suppliers, rental companies and service companies to get current prices. The use of Force Account markups for overhead and profit should not be automatic. These markups may not be appropriate for the change work. This type of estimate requires the Project Engineer to establish what types of equipment the Contractor may utilize for the work, as well as estimate the level of efficiency of the Contractor's work force. The Project Engineer must also establish labor and equipment rates.

If additional aspects need to be considered in estimating the cost of change work, RS Means Heavy Construction Cost Estimating guide may be helpful. Information on the use of the RS Means Cost Estimating Guides, as well as other methods may be found on the internet at the Project Management website. Also, the Design Office provides training in cost estimating for designers, and this training may be beneficial to those writing change orders. Further guidance on cost estimating may also be found in the Plans Preparation Manual and the PS & E training course.

### **G. CCIS, Change Order Tracking, and Back-up Documentation**

It is required that all change orders be entered into the CCIS system, and that all information be kept current. WSDOT uses CCIS to track and report on change orders. In order to report accurately, this information must be current and accurate.

It is essential that a change order log be used to track the status of change orders. It is advisable that change orders be tracked prior to execution in order to insure that the change order is processed expeditiously and that the change order is executed or, if warranted, approval to begin the work prior to execution of the change order is obtained from the executing authority, prior to any change order work being performed.

The Project Engineer maintains the change order backup information in the file with the change order. This material should be clear enough that someone unfamiliar with the project can understand why and how the change came about, and why any compensation is justified and reasonable. It should also include documentation of all approvals obtained. This will prove indispensable should the change order be subject to problems later, the FHWA reviews the file, or internal auditors are reviewing change orders.



## **Section III**

### **III. NEGOTIATING AGREED PRICES AND TIME**

- A. Definition of Criteria and Timing
- B. Negotiation Before Change Order Work Begins
- C. Negotiation After Change Order Work Begins

### **III. NEGOTIATING AGREED PRICES AND TIME**

#### **A. Definition of Criteria and Timing**

When the change order process has reached the point of negotiation, there are two major criteria to keep in mind:

1. The Project Engineer must negotiate to obtain an agreement that is in the best interest of the state; price and all other factors considered.
2. The price agreed upon must be equitable and reasonable for the change work. The state should not attempt to under-price the work, nor should the Contractor be allowed to over-price the work. The Contractor is entitled to a fair profit.

The most critical part of the negotiating process is the timing of the negotiations. It is always preferred that negotiation be done before any change order work is performed.

#### **B. Negotiation Before Change Order Work Begins**

The Project Engineer should enter the negotiation by presenting the Contractor with a complete description of the changed work. This should include plans and specifications, as well as any other documentation required to fully explain the changed work, describe the materials that are required, and detail how the work will be measured and paid. The Contractor, after studying the proposal can then present what he considers to be a fair price for the work.

The Project Engineer will then compare the Contractor prepared estimate to the previously prepared engineer's independent estimate. If there is a large difference in price, the basis for each estimate must be discussed. If unit contract prices from recent contracts were used for the engineer's independent estimate, the Project Engineer should compare the change order work to the work represented by the unit bid prices. Sometimes the work or quantity is not similar. Dissimilarities can be caused by location, local site conditions, different equipment requirements, or haul differences. When agreement cannot be reached using an estimate based on unit bid prices – adjusted for specific change order conditions – the Project Engineer should prepare an estimate based on time and materials.

A time and materials estimate will be based on estimates of the labor, materials, and equipment used to complete each item of changed work. When there is a difference in prices, breaking the cost down in this manner will make it much easier to identify where discrepancies exist. Since this type of estimate places the burden, on the estimator, of establishing the amount of time it will take to do

the work (production rates), as well as what types of equipment are required, this is usually where differences surface.

Usually agreement can be reached on the type of equipment, equipment rates, duration of use, etc., so that the changed work may be forward priced before any changed work is performed. If the changed work or duration cannot be clearly defined or adequately quantified, and agreement cannot be reached to forward price the work, the engineer can use the Force Account method, per Standard Specification 1-09.6, to make payment for the changed work.

On multi-season project, the Engineer and Contractor may agree to measure a portion of the changed work using Force Account methods, with the intent to forward price the remainder of the work – a method known as “the measured mile”. This method is most applicable to work that is of long duration.

The Engineer may also consider establishing the cost and duration unilaterally, based on the engineer’s independent estimate. If the Project Engineer is confident that the price and duration for the changed work can be supported, there is nothing wrong with issuing a change order to the Contractor unilaterally.

Another aspect of the negotiation that should be considered is that of contract time. Any change that impacts an activity on the critical path of the Contractor’s schedule, or that causes another item to become a critical item, will need to be evaluated for an adjustment of working days. During the negotiating phase, agreement should be reached on how long it will take the Contractor to have the appropriate equipment available, how long it will take to obtain any required materials, and how long it will take to accomplish the actual change work. The appropriate amount of time should then be included in the change order so that the entire issue is resolved. (*Decreasing time is appropriate if the change order saves time*).

Sometimes the Contractor will be unwilling to commit to a stated number of working days. If there is an entitlement for additional time, it is usually better to include working days based on the engineer’s independent estimate, even if the Contractor does not agree. The issue of time may be considered after the change order work is completed; however, resolving any issue of time with the change order is the preferred method. A statement in the change order, indicating that time will be considered at a later date, is required when time is not resolved with the change order. *A time statement must be included in all change orders.*

### **C. Negotiation After Change Order Work Begins**

There are times when it might be necessary to proceed with the change order work without agreement upon prices for the new work. This may happen when it is impossible to estimate the amount of work required. When this happens, there are several alternatives for handling the problem:

1. Agree to use Force Account to measure and pay for the change work prior to proceeding with the work.
2. Proceed with a unilateral change order. Adjustments to the amount of compensation may be made later if cost records justify such an adjustment.
3. Use the “measured mile” method.

## Section IV

### IV. CHANGE ORDER DOCUMENT COMPOSITION

- A. Change Order Pages
- B. Signature Page
- C. Text Page(s)
- D. Accounting Page
- E. Condition Of Award
- F. Supplemental Plan Sheets
- G. CCIS And Backup File

#### IV. CHANGE ORDER DOCUMENT COMPOSITION

##### A. Change Order Pages

The Construction Contract Information System (CCIS) is used to create, track, and print change orders. A change order document consists of the standard CCIS generated pages, any drawings or plan sheets needed to illustrate the change, and any other documentation referenced in the text of the change order. A change order does not have attachments. Any document required by, or referenced in, the text must be part of the change order, and must be appropriately identified with the Contract number, change order number, and change order page number.

The standard CCIS pages consist of page 1 (the signature page), page 2 (the text page(s)), page 3 (the accounting page(s)), and when applicable, page 4 (the COA – Condition of Award – page(s)).

##### B. Page 1 (Signature Page)

The first page of the change order deals mostly with the approval/execution of the change order. The header information, as well as the financial information, is automatically pulled from CCIS when the change order is printed. The rest of the page has spaces for signatures and dates, indicating concurrence by the Contractor (and when applicable, Surety) and approval/execution of the change order by the Project Engineer, Region Construction Engineer, and HQ Construction.

##### C. Page 2 (Text Page)

The change order text page(s) contain(s) all of the terms and requirements of the change, with references. Note the beginning statement on the change order text page, which reads, “All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.” This statement, which is printed automatically by the CCIS system, saves the Project Engineer the trouble of describing every new standard item of work involved in the change, including measurement and payment specifications.

The main body of the change order should contain text explaining and detailing:

1. Description of what is being changed (including the location of the work, any pertinent specification reference, etc.) and the work required to complete the change.
2. Material requirements for new or modified materials used in the change.

3. Construction requirements for the change work.
4. Measurement of the change work.
5. Payment for the change work.
6. Time Statement

The description should tell, clearly and concisely, but with as much detail as required, exactly what work the Contractor is required to perform in accomplishing this change. The description should also include the location of the change work.

Material requirements are the specific requirements for any new or modified materials that may be required for the change work. This section should include the acceptance criteria for the new material, and should be written in a manner similar to the Standard Specifications, if the material is not already covered by the Standard Specification.

Construction requirements describe any additional or changed requirements in the way the change work is to be performed.

Measurement is a description of exactly how each new non-standard item will be measured for payment. This may also include a description of what is not included as a part of the item.

Payment describes in detail how each new non-standard item is to be paid.

All change orders must include a statement addressing time. It is preferred that time be negotiated and included as a part of the change order. However, if this is not possible, a statement providing for future determination of time should be included. If time is not affected by the change, a statement that no adjustment in contract time will be made should be included.

All this change order text must be written in Microsoft Word, and uploaded to CCIS via a Word macro (see your IT group to have the macro installed on your computer). The text cannot be altered in CCIS. If the text must be modified, it must be revised in MS Word and uploaded again to CCIS.

#### **D. Page 3 (Accounting Page)**

The accounting page summarizes and lists all of the added, deleted, or modified pay items affected by the change order, the price of each added, deleted, or

modified item, the quantity of changed work, and the total dollar amount of the change. It also breaks the quantities into groups, in a manner similar to the summary of quantities included in the plans.

#### **E. Page 4 (COA Page)**

The Condition of Award page will only be printed if a COA change order alters COA items. The change may modify the quantity of an existing COA item, add a new COA item, or delete an existing COA item. All modification to contract items should be checked against COA items. If a change order modifies or deletes an item that is part of the Condition of Award, approval must be obtained from HQ Construction, with concurrence from the Office of Equal Opportunity, and the affected Condition of Award subcontractor.

Care must be taken to insure that when replacing a deleted COA item with a new item, the dollar amount is the same. (For example, if the original COA item had a dollar value of \$1,000 and the new item has a value of \$2,000; the COA goal is effectively increased by \$1,000).

#### **F. Supplemental Plan Sheets**

Supplemental plan sheets may be required to show additional details of the change work. They should be clearly marked with the contract number, change order number, sheet number, and change order page number, and must be included as part of the change order document. (Since these plan sheets detail physical changes to the contract work, they are useful as a basis for the required "As Built" plans at the conclusion of the contract.)

#### **G. CCIS And Backup File**

At this point the change order text should be uploaded to CCIS, any modifications made to existing items, and any new items created in CCIS. Any reduction or addition of contract time should be addressed at this time. Now the change order may be printed and sent to the Contractor for signature. Make sure that all of the information and dates in CCIS are current.

All correspondence to and from the Contractor regarding the change order should be kept with the backup file for the change order. If the change involves a DMWBE subcontractor, it requires concurrence from the affected subcontractor. This concurrence must be part of the file.



## **Section V**

### **V. PROCESSING THE CHANGE ORDER**

- A. Order of Processing
- B. The Minor Change Process
- C. Change Order Justification Memo

## **V. PROCESSING THE CHANGE ORDER**

### **A. Order Of Processing**

The change order must be prepared in accordance with the terms negotiated. Once the change order has been prepared, the next step is to print the change order. Some Regions prefer that they be given a chance to review the change order package before it is sent to the Contractor. This will greatly reduce the chance of problems with the change order, since it will be reviewed in accordance with "HQ Construction Office Change Order Review Criteria". Next the change order should be sent to the Contractor to obtain the Contractor's signature as concurrence, when required. The "Sent To Contr" date in CCIS should now be entered, which locks the change order and prevents further modification. This insures that the document sent to the Contractor is identical to the one in CCIS. The Contractor's signature is not required on all change orders, but if time allows, it is good business practice to offer the Contractor the opportunity to review and sign the change order. Section 1-2.4(C) 7 of the Construction Manual defines when the Contractor's signature is warranted. When sending the change order to the Contractor, it is a good practice to include a date for the return of the change order from the Contractor. This will help insure that the change order progresses through the system and doesn't get bogged down or forgotten.

The next step is for the Project Engineer to sign and date the change order, either approving/executing the change order, if appropriate, or recommending approval by Region Construction/ HQ Construction.

### **B. The Minor Change Process**

All contracts now have a standard item for "Minor Change". If the change is non-structural in nature, valued at \$15,000 or less, and any change in working days is 10 days or less, the Project Engineer may use the Minor Change form (DOT form 421-005A EF). If using the Minor Change process, the Project Engineer may execute the change order.

Some things to keep in mind when using the minor change process are:

- Minor Changes have the same approval requirements, per the change order checklist, as conventional change orders.
- The CCIS requirements are similar to those of a conventional change order. All the same date and initial fields must be completed; however, there will be no change order text page or accounting page. The short description must be descriptive enough to explain the change.

- The Minor Change form takes the place of the justification memorandum. Therefore, the text on the form must fully explain and justify the change, as well as any cost or time.
- The Minor Change item is a lump sum item. The cost may be tracked and measured in many different ways, but must only be paid using the lump sum Minor Change item.

### **C. Change Order Justification Memorandum**

For conventional change orders (not Minor Change), the Project Engineer must prepare a justification memorandum, which documents the need for the change, explaining why the issue is not covered by the original contract, what options were considered and by whom; and it must provide substantiation for new item prices or adjustment to contract item prices. Any impact to contract time must be addressed and any adjustment to contract time must be justified and documented. If an approval to proceed with the work prior to execution of the change order was given, it must be documented in the memo. Any unusual circumstances or problems that are not resolved, such as the Contractor refusing to sign the change order, must be explained. All supporting documentation should be readily, since the change order justification process must be documented before the change order is prepared. When preparing the memorandum, remember that the person reviewing it may have limited knowledge of the project, and their ability to review and/or approve the change order is closely related to the explanation given in the transmittal. The memorandum package should include the completed change order checklist, the engineer's independent estimate, and all appropriate approval documentation.

Chapter 1-02.4C(6)[2] of the Construction Manual and "HQ Construction Office Change Order Review Criteria" give further guidance on the requirements of the memorandum.

The change order justification memorandum should be prepared as a "thru" memorandum. That is, it should be addressed to the appropriate Headquarters Construction office person "thru" the Region Construction Engineer or Engineering Manager. The reasons for this are twofold. The Project Engineer usually knows the most about the change, and should be able to explain it best, and it saves the Region office the time and trouble of trying to paraphrase and/or retype the Project Engineer's memo.

Make sure that all the appropriate information, dates and initials have been entered into CCIS, and then send the change order and memorandum package to the Region Construction Office. There the change order and memo will be reviewed. Most Region Construction offices will review change orders to make sure that they meet the requirement of "HQ Construction Office Change Order Review Criteria". It is important that sufficient time be allowed for this review, as

well as for HQ Construction review. These reviews allow for any concerns to be addressed before the change order is executed. At this time any deficiencies in the documents may be corrected or additional information requested. If the change order requires Region execution, the Region Construction Engineer or Engineering Manager will sign the change order and execute it, if appropriate. If the change order requires HQ execution, the Region Construction Engineer or Engineering Manager will endorse the change order with a recommendation that HQ execute it, and forward the entire package to HQ Construction Office for review and execution.

The “HQ Construction Office Change Order Review Criteria” document is included in the appendices of this manual.

Once it has been reviewed at Headquarters, the change order will be either approved/ executed, more information requested prior to approval or, the change order may be deemed to be unapprovable by Headquarters staff. On these occasions, the change order may be returned to the Region by memo, outlining the concerns and reasons for return. This step may be handled with an e-mail or phone call.

In accordance with the WSDOT/FHWA Stewardship Agreement, prior approval from FHWA is required for any change, on a contract for which FHWA retains Stewardship, which is valued at \$200,000 or more, or changes the scope, termini, or character of the project. In these cases, the HQ Construction Office will forward the change order package to FHWA with a recommendation that it be approved. Once approved, the change order will be returned to HQ Construction and a copy will be sent back to Region Construction.

Distribution of executed change orders is as follows:

#### Region (and PE) Executed

- Contractor
- State Construction Office
- State Office of Accountability and Financial Services

*Note: If using the Minor Change process, the Minor Change form substitutes for the memorandum and CCIS change order print out.*

#### Headquarters Executed

- Contractor
- Region
- State Office of Accountability and Financial Services
- State Bridge Office, Design and Materials Lab – if appropriate

## Section VI

### VI. SPECIAL CHANGE ORDER CONSIDERATIONS

- A. Cardinal Changes
- B. Changed Condition
- C. Unilateral Equitable Adjustment
- D. Underruns and Overruns of Major Items
- E. Disposal of Surplus Materials
- F. Claim Settlement
- G. Contract Time
- H. Condition of Award
- I. Conversion Factors / Scale Credits
- J. Equal of Superior Product
- K. Deleted Work
- L. Consent of Surety
- M. Credits for Nonspecification Material
- N. CRIP

## VI. SPECIAL CHANGE ORDER CONSIDERATIONS

### A. Cardinal Changes

A “Cardinal Change” is a change to the contract that adds work of a type not included in the original scope of the contract, with a dollar value of \$7,500 or more. Cardinal changes are not eligible for the change order process, since they in essence award a contract to the Contractor without the process of competitive bidding.

RCW 47.28.050 states that any change to the contract beyond \$7,500, that is beyond the original scope of the project must go through the competitive bidding process. FHWA regulations also require that all construction contracts entered into by WSDOT go through the competitive bidding process.

When evaluating a potential change order, it is imperative that the change actually be a change to the contract and not the addition of a new contract.

### B. Changed Condition

In order to qualify as Changed Condition, the change must comply with the requirements of Standard Specification 1-04.7, i.e. conditions differ materially from those described in the contract, preexisting underground conditions of an unusual nature, etc. The Project Engineer must contact HQ Construction for a determination of changed condition.

### C. Unilateral Equitable Adjustment

Almost any compensation, whether agreed upon or not, is considered to be an equitable adjustment. If the parties cannot agree on a price and Force Account is not appropriate, then the contract allows the Project Engineer to determine the adjustment in the Contractor's payment - (Section 1-04.4). If the Project Engineer determines the adjustment without agreement, then the equitable adjustment is unilateral. This type of action should not be avoided when it is called for. It is simply an available action under the contract. As such, it is no different from other allowed actions, such as a Contractor's notice of changed condition or the Engineer's determination of workable days. Regardless of how the decision is made, the Project Engineer has an obligation to advise the Contractor that work is being ordered and how payment will be made. Contractors have the right to protest unilateral changes and follow up with price demands and other arguments that protect their rights (Section 1-04.5). In the meantime, however, the work is proceeding, delays are

avoided and WSDOT has paid the Contractor the amount that they have determined to be equitable.

#### **D. Underruns and Overruns of Major Items**

In accordance with the contract, WSDOT and the Contractor are required to assume the risk for variations in quantity up to 25% above or below proposal quantities. If the final quantity variation is more than 25%, based on the proposal quantity, renegotiation is available to either party.

In the case of overruns, only the units measured in excess of 125 % of the proposal quantity are eligible for renegotiation. Any units measured above proposal quantity, but less than 125% of proposal quantity should not be included in the renegotiation.

In the case of underruns, any adjustment must be based upon one of three factors:

1. Increase or decrease in unit costs of labor, materials or equipment, used for work actually performed, resulting *solely* from the reduction in quantity;
2. Changes in production rates or method of performing work actually done if it materially differs from the work included in the original plan, and;
3. An adjustment for the lost contribution to fixed cost and overhead associated with those units not performed, below the 75% limit.

The Engineer should keep in mind that in accordance with Standard Specification Section 1-04.6, the total payment (including adjustment amount and amount paid for work performed) shall not exceed 75% of the proposal amount.

Consequential damages are not compensable per Section 1-04.6 of the Standard Specification. Similarly, profit that the contractor might have made on some other work, but for the need to perform the extra work in an overrun, is also not compensable.

#### **E. Disposal of Surplus Materials**

Disposal of surplus processed material from a state-owned source does not require a change order. When excess aggregate is produced by the Contractor from a WSDOT furnished source, the Contractor will be reimbursed actual production costs if the excess materials meet specification.

The handling of deleted or unneeded/unused materials that have been ordered by or delivered to the Contractor should be in accordance with Chapter 1-2.4C(1)(II) of the Construction Manual, as follows:

### 1. *Contractor Restock*

The first and best method for disposing of the materials is to request that the contractor attempt to return the materials to the supplier at cost or subject to a reasonable restocking charge. If the materials are restocked then, in accordance with Section 1-09 of the *Standard Specifications*, the contractor's actual costs incurred in handling the materials may be paid.

### 2. *Contractor Purchase*

If WSDOT cannot utilize the materials, the contractor may elect to retain them for other work. Once again, in accordance with Section 1-09 of the *Standard Specifications*, the contractor's actual costs incurred to handle the materials may be paid.

### 3. *State Purchase and Disposal*

As a last resort, if the materials can not be disposed of at a reasonable cost to WSDOT, the Department may choose to purchase the materials from the contractor. There are some limitations that come with the use of federal funds that may require that the materials be purchased using only state funds. In some instances, WSDOT may purchase the material for use on future projects and recoup the cost from FHWA, over time, as the material is incorporated into these future projects. The State Construction office may be contacted for advice.

If possible, such materials may be provided to a future contractor (work with Design) or to Maintenance (work with the Regional Maintenance Office). If the materials cannot be used, they shall be disposed of as described in the manual for *Disposal of Personal Property* (M 72-91). Once again, in accordance with Section 1-09 of the *Standard Specifications*, the contractor's actual costs incurred in handling the materials may be paid.

## F. **Claim Settlements**

Claim settlement change orders require the same approvals, documentation, and preparation as any other change order. The change order settling a formal claim must include waiver language similar to the following:

*"The Contractor, (      company name      ), by the signing of this change order agrees and certifies that:*

*Upon payment of this change order in the amount of \$\_\_\_\_\_, any and all claims set forth in the letter(s) to the Department of Transportation, dated \_\_\_\_\_ and signed by \_\_\_\_\_ of (      company*



name ) in the approximate amount of \$\_\_\_\_\_, have been satisfied in full and the State of Washington is released and discharged from any such claims or extra compensation”.

If the settlement is intended to close out all dispute discussions for the contract, use language similar to:

“The Contractor, ( company name ), by the signing of this change order agrees and certifies that:

Upon payment of this change order in the amount of \$\_\_\_\_\_, any and all claims in any manner arising out of, or pertaining to, Contract No. \_\_\_\_\_, (including but not limited to those certain claims set forth in the letter(s) to the Department of Transportation, dated \_\_\_\_\_ and signed by \_\_\_\_\_ of ( company name ) in the approximate amount of \$\_\_\_\_\_, have been satisfied in full and the State of Washington is released and discharged from any such claims or extra compensation in any manner arising out of Contract No. \_\_\_\_\_.”

#### **G. Contract Time**

A statement about contract time must be included in every change order. When change order work impacts items on the Contractor’s critical path, or causes another item of work to become critical, time is affected by the change work. Time should be addressed as a part of the change order. If the amount of time can not be agreed upon, the Project Engineer may unilaterally grant time, based on the engineer’s independent estimate. The issue of time may be specifically left open in the change order. Time can then be addressed through an extension of time request initiated by the Contractor. See Section 1-08.8 of the Standard Specifications for the requirements of a time extension.

#### **H. Condition of Award**

When a change to the contract impacts items of work that are part of the Condition of Award, as defined in the award letter, a revision to the Condition of Award must be addressed. This type of change order must have approval from Headquarters and concurrence from the Office of Equal Opportunity. The affected DBE subcontractor is asked to sign the change order to indicate awareness of the change, but the subcontractor is not allowed approval/disapproval power. This type of change order must be executed by Headquarters.

**I. Conversion Factors**

Change orders that involve a conversion factor usually are of the type that converts from one unit of measure to another unit of measure for payment. For minor construction items, Section 1-09.2(5) of the Standard Specifications allows the use of an agreed upon conversion factor. This requires that a change order be prepared or letter of agreement be on file, to allow the conversion, but no credit is pursued for the lack of a scale, etc. If a conversion is desired for anything but a minor quantity, a conversion factor is determined specifically for the material in question, and a scale credit may be included as part of the change order.

**J. Equal or Superior Product**

This is a common type of change order proposed by the Contractor, and is generally related to a material/product substitution. Typically there is no payment to the Contractor for this type of change order. There may be a credit to WSDOT based on the saving to the Contractor.

**K. Deleted Work**

When items are deleted from a contract, a check must be made to see if the Contractor has ordered or taken delivery of any materials or equipment required for these items. When work is decreased or deleted by the contracting agency, payment will only be for the costs actually incurred for partially completed work. No profit will be allowed for work that was not completed. Consequential damages are also not allowed. In the case of a portion of a lump sum item, or partially completed unit items, the value of this work will need to be determined. It may also be necessary to negotiate a price adjustment for the work that was performed and paid using a contract unit price if there is a material difference in the nature of the accomplished work, when compared to the nature of the overall planned work. Under certain circumstances when the contractor says “you eliminated all the easy work and left the difficult work,” there may be entitlement to an adjustment.

In the event that the deletion impacts the critical path for the project, an adjustment in working days may also be appropriate.

The engineer should make sure that the items to be deleted, and the groups they are in, have not been deleted or reduced by addendum, prior change orders, etc. Do not rely on the plan quantity alone.

The engineer should also check to make sure that the deleted work is not part of the Condition of Award, since this would require that the change order address a change to the Condition of Award.

**L. Consent of Surety Required**

On any change of large value or risk, consent of surety should be considered. If consent of surety is requested, make sure that the appropriate signature and date fields are completed on the change order document and in CCIS.

**M. Credits for Nonspecification Material**

Use of nonspecification material is often discovered after the fact, when testing the material shows that it failed to meet specified requirements. It may also be the use of a substitute material. The State Construction Office will consult with the Materials Laboratory to ensure that the nonspecification material will perform acceptably prior to issuing State Construction Office approval. The pricing of a credit may be based on savings (delete this and replace with that), on the loss of product value to WSDOT (service life, increased maintenance costs, etc.), or on a statistical evaluation of the material.

**N. Cost Reduction Incentive Proposal (CRIP)**

If a proposal offers the same end result as the original design intent, if it was the Contractor's idea, if it saves money, if the Contractor has to provide an effort to make it happen, and if we agree that we would have spent the money, but for the Contractor's suggestion, then the Contractor is entitled to a full 50% of the savings, regardless of whether we are talking about design changes, product substitutions, or even deletions of contracted work that proved to be unnecessary. CRIPs are documented through change orders. Chapter 1-02.4(C) of the Construction Manual outlines the procedures and requirements for preparing a CRIP.

## Section VII

### VII. TYPICAL PROBLEMS IN THE CHANGE ORDER PROCESS

- A. After-the-fact change orders
- B. Unjustified need
- C. Unacceptable credit or substitution.
- D. No cost changes
- E. Failure to follow the guidelines
- F. Failure to obtain prior approval to proceed
- G. Prior approvals - not following through
- H. Incorrectly marked
- I. Explanation insufficient
- J. Inadequate description of work, measurement, payment
- K. Entitlement not justified
- L. Purchase or disposal of surplus materials not handled in accordance with the Construction Manual.
- M. No concurrence or approval of Region or Headquarters.
- N. Region approved vs. Headquarters approved
- O. Extension of time
- P. Incidental to other work
- Q. Actual vs. prior approval quantities
- R. Structural change
- S. Incorrect item or group
- T. Contractor edits change order

## VII. TYPICAL PROBLEMS IN THE CHANGE ORDER PROCESS

### A. After-The-Fact Change Orders

After-the fact change orders are not condoned. When an after-the-fact change order is compounded by the fact that the price is unsubstantiated or the change should not have been allowed, it can cause strained relations between the Contractor and the Project Engineer, the Project Engineer and the Region and between the Region and Headquarters.

### B. Unjustified Need

Failure to clearly justifying the need for a change is cause for nonapproval. The need has to be explained in such a way that those unfamiliar with the details of the project can understand, and agree with, the need for the change.

### C. Contractor Proposed Changes

Contractor proposed changes should typically include a credit for equal products but there may be no cost for superior products that will benefit the state.

### D. No Cost Changes

No cost changes proposed by the Contractor usually fail to address the equal or superior product situation. Most often the Contractor proposes the change because of some benefit to the Contractor. The state is entitled to that benefit. A credit of working days is considered a benefit. If the change does not provide a windfall profit to the Contractor, a no-cost change order may be appropriate.

### E. Procedural Flaws

Change orders may have procedural flaws because the change order sections of the Construction Manual have not been followed. The most common error in this category is the lack of approval, missing documentation of the approval, or approval by the wrong person.

### F. No Prior Approval

A change order must be executed in writing, or granted prior approval by the executing authority, before any of the change order work actually takes place. The prior approval must be documented and this documentation included with the change order package.

**G. Failure to Follow Through**

Obtaining approval to proceed prior to execution of the change order, without promptly following with the change order causes credibility problems. When these prior approvals are given, it is with the understanding that the need is immediate and that the change order will follow as soon as possible.

**H. Incorrectly Marked**

Almost any change order that does not provide a credit to the state should be marked “Ordered by the Engineer”.

Contractor proposed changes should generally be a credit to the state unless we are clearly getting a superior product from which the state can realize a benefit. In the latter case, it would be a no cost change order, proposed by the Contractor. Contractor proposed repair procedures to correct unsatisfactory work are usually no cost change orders. In all cases where the change is truly initiated by the Contractor, make sure that the appropriate field is indicated in CCIS.

**I. Insufficient Detail**

The need for a change order, and justification for the cost, has to be clear and understandable to non-engineers (auditors, etc.). If the justification is not clear, much time may be spent later trying to convince a reviewer of its merits. This often happens at a much later date, when the engineer may have forgotten the facts surrounding the change order.

**J. Inadequate Description**

The same rules that apply to writing special provisions apply to writing a change order. The work has to be adequately described, and a method for measurement and payment has to be spelled out in the change order text.

**K. Entitlement**

When a change order grants a Contractor additional moneys or time, entitlement must be established. This must be done in the justification memo in sufficient detail, with sources documented, that an auditor will be satisfied. This documentation should include an independent estimate of the cost and should not be a reiteration of the Contractor’s submitted cost estimate.

**L. Surplus Material**

Items deleted from the project or the purchase of surplus processed materials, often lack proper documentation. The requirements as laid out in Chapter 1-02.4(C) 1(II) must be followed. Also, we occasionally see change orders wherein the Project Engineer attempts to keep, or give to Maintenance, items that are salvaged from the project. On Federal Aid projects, the question of salvage and value must be discussed with the FHWA Area Engineer prior to initiating the change order.

**M. No Approval**

When the Project Engineer agrees to a change without prior concurrence from Region or Headquarters, problems can occur. Changes have to be documented by a written change order, and when the change or the compensation cannot be justified or agreed to by Region or Headquarters, the Project Engineer is placed in an awkward position.

**N. Inappropriate Approval**

Occasionally, change orders come to Headquarters that do not have the correct approvals documented. They may be change orders marked "Approved by the Region", that are in fact changes requiring approval from HQ. Once again, this causes major problems if the approval must be rescinded.

**O. Justification Of Time**

Additional time is sometimes not addressed in the change order. It is imperative that it be addressed and hopefully, resolved. This can be done unilaterally if the Contractor and the Project Engineer cannot come to agreement on the appropriate amount of time involved. At the very least, an agreement should be made to address time as soon as the work is done and its overall impact can be resolved.

**P. Incidental Work**

Change orders written for work that is incidental, by standard specification, special provision, or amendment, to other items of work are usually caused by overlooking these provisions and amendments during the change order process; and may result in double payment if approved. Double payments are not allowed.

**Q. Actual vs. Prior Approval Quantities**

If quantities of additional work used to request approval to proceed prior to execution of the change order do not substantially agree with the quantities in the prepared change order, this may negate the prior approval. The prior approval may be for a specific type and quantity of work, and if these types or quantities change during the change order process, a new approval may be warranted.

**R. Failure To Recognize A Structural Change**

When a change is made on a structure, it should be evaluated to determine if it is a structural change. Even changes that appear to be minor may in fact be structural in nature. If there is any doubt about whether or not a change is structural in nature, contact HQ Construction for a determination. If a change is structural in nature, it will require approval from HQ Construction, and it is not eligible for the Minor Change process.

**S. Incorrect Item or Group**

Some change orders are received at Region or HQ that have incorrect contract item numbers or incorrect group numbers. The Project office should proof-read the change orders to insure that items and groups affected by the change order are represented correctly in the change order document. Also check to be sure that the items and groups being affected by the change have not been reduced or deleted by addendum, prior change orders, etc.

**T. Contractor Edits**

Sometimes the Contractor will return a signed change order to the Project Engineer that will include edits made by the Contractor. The Project office should watch for this. If the edits are acceptable, i.e. do not alter the change order to a degree requiring further, or extra, approvals, the Project Engineer should continue with the execution process. If the edits are not acceptable, the change order must not be executed, and a new change order must be negotiated.



## State Construction Office Change Order Review Criteria

Revised July 2008

### **Forward**

The State Construction Office reviews all change orders initiated on WSDOT projects in order to comply with the WSDOT obligations set forth in the Federal-Aid Highway Program Stewardship and Oversight Agreement, and in keeping with WSDOT delegation of authority. Much of the State Construction Office authority to approve changes has been delegated to the Regions through the change order checklist. However, the State Construction Office retains review and oversight responsibilities in order to assure adherence to WSDOT policies and principles, and to State and Federal statutes. The State Construction Office seeks to achieve statewide consistency, while allowing for appropriate local variations, and to assist those who initiate change order in the successful completion of an effective and enforceable order.

Change order reviewers at the State Construction Office have adopted the following criteria for evaluating change order documents. These criteria are employed to assess the quality of the change document and of the accompanying memorandum. They are applied to all change orders, not just those few submitted for executed by the State Construction Office, but also to those executed by the Region (or PE) and submitted for review.

These criteria are not intended to cover the concept, intent, judgment and wisdom of making the change. While that is another significant duty of the State Construction Office, it is covered by other criteria. The purpose of this effort is to use these criteria to evaluate the quality and effectiveness of the documents created, once the decision to make a change has been made.

### **The Change Order Document**

Once properly executed, the change order becomes a part of the contract documents. It must stand on its own, clearly and without ambiguity defining a change to the contract. During preparation of a change order, it is wise to assume that the document may appear in a court of law. At that time, there will be no opportunity to explain any missing or conflicting provisions. The intent of the parties will be meaningless when compared to a literal reading of the change order. Any ambiguities will be held against the owner, who created the document.

Change order documents must be well organized and written to present a clear and rational order to the Contractor. There can be no attachments to a change order. Additional pages of a change order are just that – additional pages. All pages of a change order must be identifiable; using the CCIS assigned unique contract number/change order number combination, the date of final preparation of the overall document, and a page sequencing number in the format “*Page X of Y Pages*”.

Most change orders are in the form of an order to the Contractor to perform additional work, delete some portion of the work, perform some part of the work in a different manner, or to perform some part of the work under different restrictions or requirement than those in the original contract. Other change orders formalize agreements, settlements, or changes in the time for completion of the contract or for a segment of the work.

The following areas may need to be addressed in any change order. Some may apply and some may not, depending on the nature of the change. The person preparing the change order should consider each of these areas and apply judgment as to whether it should be included, and if included, how it should be expressed. In the opinion of the State Construction Office change order reviewers, those areas underlined must be addressed.

1. Description of the Work.

In a simple change that adds work, this is straightforward. It will look much like the description in a Standard Specification or Special Provision. In other cases, it might be the identification of an agreement. In all cases it must clearly describe the change to the contract.

2. Materials Requirements.

When applicable, describe the materials involved in the change. Define any physical properties that must be met. Typically, this area would only apply in the case of added or changed work.

3. Construction Requirements.

This is similar to the same issue in the Standard Specifications or Special Provisions. Define the specific requirements that must be met during performance of the work. Again, this usually applies to added or changed work.

4. Measurement.

If the change creates a new item for payment, this provision must be included. It will determine the contractual limits for the payment. If there is no unit of measurement (force account or lump sum), a statement stating that should be included.

5. Payment.

If there is to be payment made by the change order, describe the payment and define what is included and what is not included in the payment. If there is no payment to be made, there should be a statement to that effect.

6. Contract Time.

If the change includes a revision in contract time, either for the entire contract or any portion of it, a statement of the time change must be included. If there is no revision in contract time state this in the change order. If the issue of time is undecided and will be left for future discussion, include an acknowledgement of this in the change

order. If there is a change to liquidated damages address this fact in the change order. In all cases, there must be a time statement in the change order.

7. Exceptions and Disclaimers.

If the Contractor's agreement with the change order is qualified in any way, clearly identify these qualifications and list any exception to the agreement in the change order. If the Contractor wishes to reserve some rights to further negotiation by adding disclaimers, negotiate language to clearly define the unresolved issues. If the Project Engineer can agree to what the Contractor wants to disclaim, the words can be added to the agreed upon change order text. This eliminates the need for hand-written or stamped exceptions.

8. Waivers.

Waiver language must be included when the change order formalizes an agreement to resolve a dispute or claim. Use the language in the Construction Manual (Chapter 1-3.3A(2), *Claims*), editing only as necessary for the specific issue and agreement. If it is possible to identify unresolved issues not covered by the agreement, the change order and waiver have even more value.

9. Professional Engineer's Stamp.

If, in the judgment of the Engineer supervising the preparation of the change order, the change order contains the practice of Engineering, that portion of the change order must be stamped. The State Construction Office will not review the decision, nor question the judgment of the Engineer, if a stamp is required.

Before closing the discussion of what must be in a change order, it may be prudent to discuss what should not be in a change order. There should be no discussion of why the change is being made. This is to become an unambiguous part of the contract document. Stating reasons is just another way of stating intent, which only creates ambiguity in the change order. There should be no discussion of justification for the change or for payment for the change. Once the change order is executed, the change exists, whether justified or not. Inclusion of justification belongs in the accompanying memorandum. There is no place in the change order for a discussion of the history of negotiations. Such discussions have no meaning once the final agreement is reached and the change order is written.

Another item that does not belong in a change order is the term "CRIP". A CRIP is a Contractor's cost reduction incentive proposal. Change orders are orders to the Contractor, not proposals. A Contractor's proposal may lead to a change order. The only difference between a change order that originated as a Contractor's cost reduction incentive proposal and any other change order should be the inclusion of two additional pay items. These are usually Contractor's Engineering Cost for CRIP Development and Contractor's Cost Reduction Incentive Payment.

## **Accompanying Memorandum**

The memorandum accompanying the change order document is a formal engineering report. By its quality it should reflect the professionalism of the project Engineer. This report serves two main purposes. First, it must describe and explain the change to the contract. Second, it must convince the reader that the decision to execute the change order was appropriate, and that any included payment or time extension is warranted and substantiated. Like the change order document, this report must stand on its own merits. The writer may assume fundamental engineering knowledge, transportation construction skills, and contract administration abilities on the part of the reader, by must not assume knowledge of issue-specific information that is not included in the memorandum package. When reviewed by the State Construction Office, the following areas will be evaluated for adequacy:

### 1. Description of the Change.

The description of change portion of the memorandum must answer the following questions:

- a. Why is the change being prepared?
- b. What do the plans, provisions and Standard Specifications require?
- c. Why won't that work?
- d. What does the change accomplish and how does it solve the problem?

### 2. Evolution of the Change.

This refers to the development of the particular method decided upon to solve the problem. How this method was chosen is valuable information, and should answer the following questions:

- a. Who was consulted about the problem?
- b. If appropriate, what alternatives were evaluated and why was this particular method chosen?
- c. Was a design approval needed, and if so, was it obtained?
- d. Was the effect on environmental permits (existing or new) assessed, and were necessary environmental approvals obtained?
- e. Was the Contractor included in the development to advise on constructability issues?

On the other hand, the evolution of the price is of little interest and need not be included in the memorandum.

### 3. Entitlement.

- a. Why is the Contractor entitled to any increased payment or added time?
- b. What is it about the contract that fails to make this work a part of that contract?
- c. Isn't it included in some other payment definition?
- d. If not directly mentioned, isn't it incidental to some other items?
- e. If the overall issue is compensable, what components are included and why are they compensable?

4. Price.

- a. Why is the price being paid considered appropriate?
- b. If using unit prices, is the work of similar magnitude and nature to that from which the unit price is obtained?
- c. If there is a new price, how was it negotiated?
- d. If independent quotes were obtained, what were they and where were they obtained?
- e. If a time and materials analysis is used, is it the work of the Project Engineer (pay particular attention to production rates)?
- f. If using the Contractor's estimate of cost as a basis, was it validated by an independent analysis?

Full records should be maintained in the Project Office, but a summary of equipment and labor costs is appropriate for inclusion with the memorandum.

5. Contract Time.

- a. Is there a time extension associated with the change order, and if so, is it linked to the entitlement area described above?
- b. How does this time extension fit in with the reasons for time extensions listed in the Standard Specification?
- c. Will the work, actually delay project completion (was the critical path affected)?
- d. Is a critical path analysis included?
- e. Is the duration of the extension reasonable for the work being done?

6. Disclaimers.

- a. Is there a disclaimer or exception in the change order and what does it mean?
- b. Why was it not covered by the negotiations?
- c. What effect will it have on the future administration of the contract?

7. Contractor Point of View.

Unless there is a disclaimer or exception in the change order, or the Contractor has refused to sign the change order (unilateral change), there is no reason to include this information. The process started because of the Contractor's point of view and ended with agreement on the change order. The purpose of the memorandum is to explain and justify the change order.

8. Other information.

The change order memorandum is a multi-use document. It is often used to support fund requests. It is provided to the Design Office to support the lesson-learned effort. It is reviewed for conformance to Region requirements and Region supervisory communication. The Project Engineer may choose to include references to these and other purposes, provide doing so will not degrade the quality of the engineering report or detract from its main purpose.

9. Attachments to the Memorandum.

- a. Change Order Checklist (completed)
- b. Documentation of design approval, approval to proceed prior to execution, etc.
- c. Supporting sketches, plan sheets, photos, etc., as needed for clarity
- d. Engineer's Independent estimate

Attachment must be complete and readable, and should be clearly referenced in the memorandum.

Closing Thought

Prepare and assemble the memorandum and attachments with the mission of convincing the reader that the Project Engineer correctly initiated and change order and did the job well.

## D. Change Orders

## 1. D1 – Pending Change Orders

This CCIS function provides a tool for setting up, revising, approving, executing, and printing a change order. This manual divides the change order into four parts: Set Up A New Change Order, Upload Change Order Text, Approve/Void Change Orders, and Print Change Orders. Because of this function's complexity, the instructions include the four separate processes.

**D1 Submenu**

NCGD100P Jan 10, 2006	WSDOT - CONSTRUCTION CONTRACTS PENDING CHANGE ORDER MENU	NCGD100M 11:10 AM
<p>1. General Information</p> <p>2. Change Items</p> <p>3. Condition of Award Items</p> <p>4. PRINT Change Order</p>		
<p>OPTION:</p> <p>PF1 (H)   PF2 (M)   PF3 (E)   PF4 (R)   PF6 (S)   PF7 (-)   PF8 (+)   PF10 (&lt;)   PF11 (&gt;)</p> <p>Menu   End   Return</p>		

## a. Set Up A New Change Order

You set up a change order by completing five steps:

- (1) Enter general information.
- (2) Add new or change items.
- (3) Enter condition of award revisions (where applicable).
- (4) Upload change order text
- (5) Print change order

## General Information

- (1) Select Option 1 from the D1 submenu.

Then select Option 1 – SET UP New Change Order

- (2) Enter the key field information.

- (a) Type the CONTRACT NO and press [Enter] or press [F1] to browse select.

CCIS skips the CHANGE ORDER NO and the REVISION fields and prompts you to enter the next field. The CHANGE ORDER NO field will be numbered automatically when you save the record the first time.

CCIS also displays the number of your last created change order as a reminder. For more information about existing change orders, press [F1] for help.

- (3) Enter/update the data on each screen page as outlined below:

**Page 1:** Enter the appropriate letter code in the “Proposed by” field. CCIS will automatically enter the date the change order is being setup in CCIC. If this date is not correct, enter the correct date at this time. Once the change order is created in CCIS, only Headquarters may change this date. Enter the appropriate letter code in the “Unilateral Change” field. Enter the appropriate letter code in the “PE stamp required” field. Type a short description of the change. Enter the appropriate letter code in the “Is this a MINOR Change” field. This field automatically defaults to “N”.



THE WSDOT CONSTRUCTION CHANGE ORDER PROCESS

Page: 1 Document Name: untitled

PLEASE ENTER NEW DETAILS FOR CHANGE ORDER - PRESS PF6 TO SAVE  
NCGD111P WSDOT - CONSTRUCTION CONTRACTS NCGD1111  
Apr 03, 2008 SETUP NEW CHANGE ORDER 3:41 PM  
Page 1 of 6

CONTRACT NO> 007305 Federal Aid No: STPF-0161(026)  
Contract Title: SR 161/SR 167 COUPLET TO 36TH ST E PAVING  
Prime Contractor: 910534168 TUCCI & SONS, INC.  
Dist No: 3 SR: 161 PE Org Code: 434305 Acceptance:  
Contractor Address: 4224 WALLER RD E 253 922 6676  
TACOMA WA 984431099

Previous Change Order No: 5\_\_  
CHANGE ORDER NO> Revision: New Revision: (Y/N)  
Proposed By: \_ (E-Engineer, C-Contracting, B-Both, or O-Outside Agency)  
Order Date: 04 03 2008 Unilateral Change: \_ (Y/N)  
PE Stamp Required: \_ (Y/N)

Short Description: \_\_\_\_\_  
Is This a MINOR Change?: N (Y/N)

OPTION: \_  
PF1(H) PF2(M) PF3(E) PF4(R) PF6(S) PF7(-) PF8(+) PF10(<) PF11(>)  
Help Menu End Return Save Page Up Page Dn

THE WSDOT CONSTRUCTION CHANGE ORDER PROCESS

**Page 2:** If prior approval was issued for this change order, enter a summary of the approval, including REQUESTED BY, APPROVED BY, APPROVAL DATE and ESTIMATED AMOUNT.

Page: 1 Document Name: untitled			
PLEASE ENTER NEW DETAILS FOR CHANGE ORDER - PRESS PF6 TO SAVE			
NCGD111P	WSDOT - CONSTRUCTION CONTRACTS	NCGD1112	
Apr 03, 2008	PENDING CHANGE ORDER	3:42 PM	
CONTRACT NO: 007305	CHANGE ORDER: R	Page 2 of 6	
Approval to proceed			
Approval Date: ____	Estimated Amount: _____		
Requested By: ____	(DO, PE)		
Approved By: ____	(HQ, DO, PE)		
Narrative:			
_____			
_____			
_____			
_____			
_____			
_____			
_____			
OPTION: _			
PF1 (H)	PF2 (M)	PF3 (E)	PF4 (R)
Menu	End	Return	Save
PF6 (S)	PF7 (-)	PF8 (+)	PF10 (<)
			Page Up
			PF11 (>)
			Page Dn

**Page 3:** CCIS automatically calculates the first five fields on this page. The CRIP (Cost Reduction Incentive Proposal) AMOUNT should be entered manually by the Project office. When setting up a new change order, the third amount, ESTIMATED NET CHANGE THIS CHANGE ORDER, will remain zero until you enter the change items.

Also, CCIS determines the CURRENT CONTRACT AMOUNT based on the ESTIMATED CONTRACT TOTAL AFTER CHANGE from the preceding change order.

Enter a brief description of the CRIP in the "General Comments:" field. Enter any other pertinent details concerning the change order in the "General Comments:" field also.

Page: 1 Document Name: untitled							
PLEASE ENTER NEW DETAILS FOR CHANGE ORDER - PRESS PF6 TO SAVE							
NCGD111P		WSDOT - CONSTRUCTION CONTRACTS				NCGD1113	
Apr 03, 2008		PENDING CHANGE ORDER				3:43 PM	
CONTRACT NO: 007305		CHANGE ORDER:		R		Page 3 of 6	
FINANCIAL SUMMARY							
1. Original Contract Amount:		1,407,401.85					
2. Current Contract Amount:							
3. Estimated Net Change This Change Order:		0.00					
4. Estimated Contract Total After Change:							
5. Total Authorized (From TRAINS):		1,425,008.07					
CRIP AMOUNT (ACTUAL SAVINGS TO THE STATE)		_____					
GENERAL COMMENTS							
_____							
_____							
_____							
_____							
_____							
_____							
OPTION: _							
PF1(H)	PF2(M)	PF3(E)	PF4(R)	PF6(S)	PF7(-)	PF8(+)	PF10(<)
	Menu	End	Return	Save			Page Up
							Page Dn

**Page 4: Contractor approvals:** Enter the date the change order is sent to the Contractor in the “Sent to Contr” field. Enter the date the change order is received back from the Contractor in the “Rec’d from Contr” field. Enter the appropriate letter code in the “Surety Consent” field. Enter the date surety signed the change order (if required) in the “Surety Date” field.

**FHWA approvals:** Enter the appropriate letter code in the “FHWA Approval” field and the date FHWA signed the change order (if required) in the “Date” field.

**PE approvals:** Enter the appropriate letter code (only if the PE is not executing the change order) in the “Recom” field. Enter the PE initials (only if the PE is executing the change order) in the “Exec” field. Enter the date the PE recommends execution or executes the change order.

**Region approvals:** Enter the appropriate letter code (only if the Region is not executing the change order) in the “Recom” field. Region should enter the Region Construction Engineer initials (only if the Region is executing the change order) in the “Exec” field. Region should enter the date the Region recommends execution or executes the change order.

**State Construction Office approvals:** Enter the appropriate letter code in the “Who” field, enter the State Construction Engineer initials in the “Exec” field, and enter the date the Construction Office executes the change order. The “Date Executed” field should be used only by Region or the State Construction Office to enter the date of execution.

**CAPS:** The “Posted in CAPS” field will be populated by CCIS.

**Voided change orders:** Enter the name of the person voiding the change order in the “By Whom” field and the date the change order is voided in the “Date” field.

CCIS will continue to update the financial summary fields until the PE sends the change order to the contractor, voids the change order, or approves a unilateral change order. This insures that the on-line version of the change order matches the printed copy that the contractor receives.

When the PE office revises the change order, CCIS clears the SENT TO CONTRACTOR, PE: RECOM and APPR fields, which allows the financial summary to be recalculated.

# THE WSDOT CONSTRUCTION CHANGE ORDER PROCESS

Page: 1 Document Name: untitled

PLEASE ENTER NEW DETAILS FOR CHANGE ORDER - PRESS PF6 TO SAVE  
NCGD111P WSDOT - CONSTRUCTION CONTRACTS NCGD1114  
Apr 03, 2008 PENDING CHANGE ORDER 3:43 PM  
CONTRACT NO: 007305 CHANGE ORDER: R Page 4 of 6

CONTRACTOR APPROVAL		WSDOT RECOMMENDATION/EXECUTION		DATE
1. Sent To Contr:	__ __ __	1. PE: Recom:	_ (y/n)/Exec	__ __ __
2. Rec'd From Contr:	__ __ __	2. DO: Recom:	_ (y/n)/Exec	__ __ __
3. Surety Consent:	_ (y/n)	3. HQ: Who	_ Exec	__ __ __
Surety Date:	__ __ __	A-Admin, S-Struct, R-Rdwy, C-Chief		
		4. Date Executed:		__ __ __
		5. Posted in CAPS:		

FHWA Approval \_\_ Date \_\_ \_\_ \_\_

CHANGE ORDER VOIDED By Whom: \_\_\_\_\_ Date: \_\_ \_\_ \_\_

OPTION: \_  
PF1(H) PF2(M) PF3(E) PF4(R) PF6(S) PF7(-) PF8(+)  
Menu End Return Save Page Up Page Dn

**Page 5:** Enter the NET CHANGE OF WORKING DAYS for each phase of the contract. To do this, first enter a PHASE NO and press [Enter]. Then enter the number of days by which to adjust the working days for that phase.

Optionally, type "Y" to indicate that the working days changes will be DETERMINED AT A LATER DATE. If this change order does not change working days, enter an "N" in DETERMINED AT A LATER DATE.

```

Page: 1 Document Name: untitled

PLEASE ENTER NEW DETAILS FOR CHANGE ORDER - PRESS PF6 TO SAVE
NCGD111P          WSDOT - CONSTRUCTION CONTRACTS          NCGD1115
Apr 03, 2008      PENDING CHANGE ORDER                    3:43 PM
                  CONTRACT NO: 007305  CHANGE ORDER:      R      Page 5 of 6

NET CHANGE OF WORKING DAYS

PHASE      DESCRIPTION      NET CHANGE
___
___
___
___
___
___
___
___
___
___

Or Determined at a Later Date? _ (Y/N)

OPTION: _
PF1(H)  PF2(M)  PF3(E)  PF4(R)  PF6(S)  PF7(-)  PF8(+ )  PF10(<)  PF11(>)
        Menu    End    Return   Save    TBL UP   TBL DN   Page Up   Page Dn

```

**Page 6:** Tab to the “What section of contract changed” field and press F1 to get a list. Select the appropriate code and hit enter to return to page 6 at the “Describe the detail change” field. Press F1 to get a list. Select the appropriate code and hit enter to return to page 6 at the “What created the need or caused the change” field. Press F1 to get a list. Select the appropriate code and hit enter to return to page 6 at the “What is the purpose of this change order” field. Press F1 to get a list. Select the appropriate code and hit enter to return to page 6 (you may select up to two codes in this category).

```

Page: 1 Document Name: untitled

USE 'F1' TO SELECT A VALID CHANGE ORDER SECTION-CODE.
NCGD111P          WSDOT - CONSTRUCTION CONTRACTS          NCGD1127
Apr 03, 2008      SETUP NEW CHANGE ORDER                  3:43 PM
                  CONTRACT NO: 007305  CHANGE ORDER: ____ R      Page 6 of 6

What Section of contract Changed?
____

Describe the Detail Change:
____

What created the Need or Caused the Change?
____

What is the Purpose of this Change Order?
____
____

PF1(H)  PF2(M)  PF3(E)  PF4(R)  PF6(S)  PF7(-)  PF8(+)  PF10(<)  PF11(>)
      Menu    End    Return    Save    Page Up    Page Dn

```

- (4) When finished, press [F6] to save the new record. CCIS will enter the next sequential number in the CHANGE ORDER NO field.

If you have additional changes to the record while still in this function, you may edit data and save again. CCIS will save your changes using the original number.

- (5) Before you print the change order you must upload the text into CCIS using an MS Word macro (contact your IT desk to have this macro installed on your computer). Your PC has the macro installed if you have a small icon that looks like two feet displayed on the tool bar.

Type the change order text and start the macro. You will be prompted to enter a Contract number and a Change Order number. Once you have entered these numbers and uploaded the text you may print the change order from your mainframe printer (usually identified as Uxxxx).

## 2. D2 – Approved Change Orders

This function allows you to view approved or voided change orders. The D2 screens duplicate the D1 – Pending COs screens, however you modify the information. To view approved and voided change orders you use the D2 submenu shown below.

### D2 Submenu

NCGD200P Jan 10, 2006	WSDOT - CONSTRUCTION CONTRACTS APPROVED CHANGE ORDER MENU	NCGD200M 3:51 PM
1. REVIEW General Information 2. BROWSE Change Items 3. BROWSE COA Revisions		
OPTION: PF1 (H)   PF2 (M)   PF3 (E)   PF4 (R)   PF6 (S)   PF7 (-)   PF8 (+)   PF10 (<)   PF11 (>) Menu       End       Return		

#### a. REVIEW General Information

- (1) Select Option 1 – REVIEW General Information from the D2 submenu.
- (2) Enter the key field information.
  - (a) Type the CONTRACT NO and press [Enter] or press [F1] to browse/select.
  - (b) Type the CHANGE ORDER NO and press [Enter] or press [F1] to browse/select.
- (3) Page 6 displays the work description text generated in MS Word and uploaded into the change order file. Press [F7] and [F8] to scroll through the text.



b. BROWSE Change Items

- (1) Select Option 2 – BROWSE Change Items from the D2 submenu.
- (2) Enter the key field information.
  - (a) Type the CONTRACT NO and press [Enter] or press [F1] to browse/select.
  - (b) Type the CHANGE ORDER NO and press [Enter] or press [F1] to browse/select.

CCIS will display the changed items for the selected change order including TOTAL ESTIMATED AMOUNT CHANGED.
- (3) Press [F7] and [F8] to scroll through the items. You may also enter a STARTING ITEM NO and press [Enter] to move quickly to a specific record.

a. BROWSE Condition of Award Changes

- (1) Select Option 3 – BROWSE COA Revisions from the D2 submenu.
- (2) Enter the key field information.
  - (a) Type the CONTRACT NO and press [Enter] or press [F1] to browse/select.
  - (b) Type the CHANGE ORDER NO and press [Enter] or press [F1] to browse/select.
  - (c) Type a FIRM ID and press [Enter] or press [F1] to browse/select.

CCIS will display the condition of award changes including CURRENT COA (before this change order) and REVISED COA (after this change order).
- (3) Press [F7] and [F8] to scroll through the condition of award changes.

### 3. D3 – Browse Reasons

This file stores two-character codes, which represent the reasons for change orders as shown below. These codes are used when generating a change order (function D1 – Pending Change Orders). The Headquarters System Administrator will be the designated person to update the reasons via this function.

*Note: This function lists some older codes that are no longer used. The codes listed below are current for use in change orders.*

## **CHANGE ORDER CODE SELECTIONS and DEFINITIONS**

### **What Section of the Contract Changed?**

AB GENERAL REQUIREMENTS (STD. SPECIFICATION DIVISION 1)  
 AC PREPARATION  
 AD GRADING/EARTHWORK  
 AE DRAINAGE  
 AF STORM SEWERS  
 AG SANITARY SEWERS  
 AH WATER LINES  
 AI STRUCTURES  
 AJ BASES  
 AK PORTLAND CEMENT CONCRETE PAVEMENT  
 AL BITUMINOUS  
 AM EROSION CONTROL AND PLANTING  
 AN TRAFFIC  
 AO MISCELLANEOUS ITEMS  
 AP ILLUMINATION SYSTEMS  
 AQ SIGNAL SYSTEMS  
 AR ITS SYSTEMS  
 FP FACILITIES PROJECT  
 MP MARINE PROJECT

### **Describe the Detail Change**

#### **AB GENERAL REQUIREMENTS (STD. SPECIFICATION DIVISION 1)**

01 SCOPE OF WORK (STD. SPEC SECTION 1-04)  
 02 CONTROL OF WORK (STD. SPEC SECTION 1-05)  
 03 CONTROL OF MATERIAL (STD. SPEC SECTION 1-06)  
 04 LEGAL RELATIONS AND RESPONSIBILITIES (SECTION 1-07)  
 05 PROSECUTION AND PROGRESS (STD. SPEC. SECTION 1-08)  
 06 MEASUREMENT AND PAYMENT (STD. SPEC. SECTION 1-09)  
 07 TEMPORARY TRAFFIC CONTROL (STD. SPEC SECTION 1-10)

**AC PREPARATION**

- 01 CLEARING AND GRUBBING
- 03 ROADSIDE CLEANUP
- 04 REMOVING AN ITEM
- 05 PRODUCTION FROM QUARRY AND PIT SITE
- 06 STOCKPILING AGGREGATES
- 07 SITE RECLAMATION

**AD GRADING/EARTHWORK**

- 01 ROADWAY EXCAVATION
- 02 ROADWAY EMBANKMENT
- 03 HAUL
- 04 SUBGRADE PREPARATION
- 05 WATERING
- 06 STRUCTURE EXCAVATION
- 07 DITCH EXCAVATION
- 08 TRIMMING AND CLEANUP
- 09 CONSTRUCTION GEOTEXTILE

**AE DRAINAGE**

- 01 DRAINS
- 02 STRUCTURAL PLATE PIPE
- 03 PIPE ARCH
- 04 ARCH
- 05 UNDERPASS
- 06 DRYWELLS
- 07 CLEANING EXISTING DRAINAGE STRUCTURES
- 08 GENERAL PIPE INSTALLATION REQUIREMENTS
- 09 CULVERTS

**AF STORM SEWERS**

- 01 GENERAL PIPE INSTALLATION REQUIREMENTS
- 02 MANHOLES
- 03 INLETS
- 04 CATCH BASINS

**AG SANITARY SEWERS**

- 01 GENERAL PIPE INSTALLATION REQUIREMENTS
- 02 SIDE SEWERS
- 03 SEWER CLEANOUTS
- 04 MANHOLES

**AH WATER LINES**

- 01 WATER LINES
- 02 VALVES FOR WATER MAINS
- 03 HYDRANTS
- 04 SERVICE CONNECTIONS

**AI STRUCTURES**

- 01 PRE-CAST CONCRETE GIRDERS
- 02 PRE-CAST CONCRETE PANELS
- 03 STEEL GIRDERS
- 04 DRILLED SHAFT
- 05 BEARINGS
- 06 POWDER COATING
- 07 REINFORCING BAR
- 08 POST-TENSIONING
- 09 CONCRETE
- 10 STRUCTURAL STEEL
- 11 TIMBER STRUCTURES
- 12 PILING STRUCTURES
- 13 BRIDGE RAILINGS
- 14 EXPANSION JOINTS
- 15 SIGN BRIDGES
- 16 PAINTING
- 17 WATERPROOFING
- 18 MODIFIED CONCRETE OVERLAY
- 19 CONCRETE BARRIER
- 20 NOISE BARRIER WALLS
- 21 STRUCTURAL EARTH WALLS
- 22 GEOSYNTHETIC RETAINING WALLS
- 23 SOIL NAIL WALLS
- 24 SOLDIER PILE AND SOLDIER PILE TIEBACK WALLS
- 25 PERMANENT GROUND ANCHORS
- 26 SHOTCRETE FACING
- 27 LUMINAIRES
- 28 BRIDGE ELECTRICAL-MECHANICAL
- 29 APPROACH SLABS

**AJ BASES**

- 01 GRAVEL BASE
- 02 BALLAST
- 03 CRUSHED SURFACING BASE COURSE
- 04 CRUSHED SURFACING TOP COURSE
- 05 ASPHALT TREATED BASE

**AK PORTLAND CEMENT CONCRETE PAVEMENT**

- 01 GRINDING
- 02 DOWEL BARS
- 03 TIE BARS
- 04 CEMENT
- 05 AGGREGATE
- 06 ADMIXTURES
- 07 WATER
- 08 PLACEMENT
- 09 CURING

**AL BITUMINOUS**

- 01 LIQUID ASPHALT
- 02 TACK COAT
- 03 ANTI-STRIPPING ADDITIVE
- 04 TEST STRIP
- 05 PLACEMENT
- 06 COMPACTION
- 07 JOINTS
- 08 PRE-LEVEL
- 09 AGGREGATES

**AM EROSION CONTROL AND PLANTING**

- 01 EROSION CONTROL
- 02 WATER POLLUTION CONTROL
- 03 IRRIGATION SYSTEMS
- 04 ROADSIDE RESTORATION
- 05 SEEDING
- 06 FERTILIZING
- 07 MULCHING

**AN TRAFFIC**

- 01 CURBS GUTTERS AND SPILLWAYS
- 02 CEMENT CONCRETE DRIVEWAY ENTRANCES
- 03 PRE-CAST TRAFFIC CURB AND BLOCK TRAFFIC CURB
- 04 RUMBLE STRIPS
- 05 RAISED PAVEMENT MARKERS
- 06 GUIDEPOSTS
- 07 GUARDRAIL
- 08 IMPACT ATTENUATOR SYSTEMS
- 09 PERMANENT SIGNING
- 10 TEMPORARY PAVEMENT MARKINGS
- 11 GLARE SCREENS
- 12 PAVEMENT MARKINGS

**AO MISCELLANEOUS ITEMS**

- 01 CHAIN LINK FENCE AND WIRE FENCE
- 02 MONUMENT CASES
- 03 CEMENT CONCRETE SIDEWALKS
- 04 RIPRAP
- 05 CONCRETE SLOPE PROTECTION
- 06 MAILBOX SUPPORT
- 07 ROCK WALLS
- 08 GRAVITY BLOCK WALL
- 09 GABION CRIBBING
- 10 WIRE MESH SLOPE PROTECTION

**AP ILLUMINATION SYSTEMS**

- 01 FOUNDATIONS
- 02 CONDUIT
- 03 JUNCTION BOXES, CABLE VAULTS AND PULL BOXES
- 04 WIRING
- 05 GROUNDING
- 06 LIGHT STANDARDS
- 07 LUMINAIRES
- 08 SIGN LIGHTING
- 09 HIGH MAST LIGHT STANDARDS

**AQ SIGNAL SYSTEMS**

- 01 FOUNDATIONS
- 02 CONDUIT
- 03 JUNCTION BOXES, CABLE VAULTS AND PULL BOXES
- 04 WIRING
- 05 GROUNDING
- 06 LUMINAIRES
- 07 SIGN LIGHTING
- 08 SIGNAL CONTROLLERS
- 09 SIGNAL HEADS
- 10 DETECTOR LOOPS
- 11 SIGNAL STANDARDS

**AR ITS SYSTEMS**

- 01 FOUNDATIONS
- 02 CONDUIT
- 03 CABINETS
- 04 JUNCTION BOXES
- 05 CABLE VAULTS
- 06 PULL BOXES
- 07 CONDUCTORS, CABLE
- 08 DETECTOR LOOPS
- 09 COMMUNICATION CABLE
- 10 VIDEO DETECTION CABLE
- 11 GROUNDING

**FP FACILITIES PROJECT**

- 01 FACILITIES

**MP MARINE PROJECT**

- AA MARINE PROJECT
- 01 TERMINAL CONSTRUCTION

**What Created the Need or Caused the Change? (Only one selection applies)**  
**Select the one that best describes what caused the change.**

- AP      \*ADMIN PROBLEM**
- BC      \*BUDGET CONSTRAINTS**
- CC      \*CHANGED CONDITIONS**
- CE      \*CONTRACTOR ERROR**
- EE      \*CONST ENGR ERROR**
- EV      \*ENVIRONMENTAL**
- HZ      \*HAZARDOUS MATERIAL**
- IP      \*CRIP**
- MS      \*MATERIAL SUBSTITUTION**
- NS      \*NON-SPEC MATERIAL**
- PI      \*PLAN ERROR-INFO.**
- PM      \*PLAN ERROR-MISTAKE**
- SC      \*SPEC CONFLICT/AMBIG**
- TP      \*THIRD PARTY REQUEST**
- UC      \*UNANTICIPATED COND**

**AP    \*ADMIN PROBLEM**

*THERE IS A PROBLEM WITH ADMINISTRATIVE FUNCTIONS THAT DOES NOT RELATE TO THE PHYSICAL WORK.*

**BC    \*BUDGET CONSTRAINTS**

*DELETION OR MODIFICATION WAS INITIATED BECAUSE THE COST OF THE PROJECT WAS EXCEEDING AUTHORIZED FUNDING LIMITS.*

**CC    \*CHANGED CONDITIONS**

*SITE CONDITIONS (OTHER THAN HAZARDOUS MATERIALS) DIFFER FROM DESIGN EXPECTATIONS AND SECTION 1-04.7 APPLIES.*

**CE    \*CONTRACTOR ERROR**

*CONTRACTOR MADE A MISTAKE IN PERFORMING THE WORK OR CAUSED SOME DAMAGE THAT NEEDS REPAIR.*

**EE    \*CONST ENGR ERROR**

*A STATE EMPLOYEE MADE A MISTAKE THAT CREATED A NEED FOR A REPAIR, MODIFICATION OR COST ADJUSTMENT.*

**EV    \*ENVIRONMENTAL**

*INITIATED TO SATISFY ADDITIONAL ENVIRONMENTAL REQUIREMENTS NOT ALREADY COVERED BY THE CONTRACT.*

**HZ    \*HAZARDOUS MATERIAL**

*A HAZARDOUS MATERIAL ENCOUNTERED DURING THE PROJECT NOT ALREADY COVERED BY THE CONTRACT.*

THE WSDOT CONSTRUCTION CHANGE ORDER PROCESS

**IP \*CRIP**

*CONTRACTOR'S COST REDUCTION INCENTIVE PROPOSAL.*

**MS \*MATERIAL SUBSTITUTION**

*CONTRACTOR PROPOSED A MATERIAL NOT ALREADY ALLOWED FOR USE IN THE CONTRACT.*

**NS \*NON-SPEC MATERIAL**

*FOR MATERIAL THAT IS OUT-OF-SPEC BUT STILL ACCEPTABLE – USUALLY INVOLVES A REDUCED PRICE OR CREDIT TO WSDOT*

**PI \*PLAN ERROR-INFO.**

*PLANS CONTAIN A MISTAKE THAT RESULTED FROM THE DESIGNER WORKING WITH INSUFFICIENT INFORMATION.*

**PM \*PLAN ERROR-MISTAKE**

*PLANS CONTAIN A MISTAKE THAT, GIVEN THE INFORMATION AVAILABLE TO THE DESIGNER, SHOULD NOT HAVE BEEN MADE.*

**SC \*SPEC CONFLICT/AMBIG**

*THERE IS A CONFLICT OR AMBIGUITY BETWEEN SPECS OR BETWEEN SPECS AND PLANS.*

**TP \*THIRD PARTY REQUEST**

*INITIATED BY ANY PARTY OTHER THAN WSDOT OR THE CONTRACTOR FOR EXAMPLE, LOCAL OR REGULATORY AGENCIES, PRIVATE PARTIES.*

**UC \*UNANTICIPATED COND**

*A SITUATION, DIFFERENT FROM THAT ASSUMED DURING DESIGN, BUT NOT QUALIFYING UNDER SECTION 1-04.7.*



What is the purpose of this Change Order? (Up to two codes may apply)

**AF** ADMIN CHANGE  
**AW** ADDED WORK  
**CO** CONDITION OF AWARD  
**CR** CORRECTION/REPAIR  
**CS** CLAIM SETTLEMENT  
**DO** DELAY COMPENSATION  
**DR** DRB DECISION  
**DS** DESIGN CHANGE  
**DW** DELETED WORK  
**EN** ENVIRONMENTAL COMPLIANCE  
**MO** QUANTITY VARIATION  
**MR** MAT'LS SPEC REVISION  
**NP** FEDERAL NON- PARTICIPATION  
**OC** OMISSION IN CONTRACT PROVISIONS  
**OP** OMISSION IN THE PLANS  
**OR** OTHER SPEC REVISION  
**RG** MODIFIES A REGION SPECIFICATION  
**RS** REVISED SCOPE  
**SA** SCHEDULE ADJUSTMENT  
**SU** DESIGN SURVEY OR BASE MAP ERROR  
**UP** UTILITY PLAN ERRORS  
**VI** RESOLVED A TITLE VI ISSUE  
**WM** WORK METHOD CHANGE

**AF** ADMIN CHANGE  
*AFFECTS ADMINISTRATIVE FUNCTIONS OF THE CONTRACT THAT DO NOT RELATE TO THE ACTUAL WORK. PREV WAGES, SALES TAX, INSUR, ETC.*

**AW** ADDED WORK  
*FOR NEW ITEMS OF WORK ADDED WITHIN THE ORIGINAL SCOPE OF THE CONTRACT.*

**CO** CONDITION OF AWARD  
*MODIFIES THE CURRENT DBE COA REQUIREMENTS.*

**CR** CORRECTION/REPAIR  
*DOCUMENTS A PROCEDURE FOR CORRECTION OR REPAIR NEEDED TO RESTORE OR BRING PERMANENT WORK TO CONTRACT REQUIREMENTS.*

**CS** CLAIM SETTLEMENT  
*ENTITLEMENT WAS FOUND FOR THE CONTRACTOR IN A CLAIM SITUATION PER SECTION 1-09.11(2)*

**DO DELAY COMPENSATION**

*COMPENSATES THE CONTRACTOR FOR DELAY DAMAGES.*

**DR DRB DECISION**

*ENTITLEMENT WAS FOUND FOR THE CONTRACTOR BY A DISPUTES REVIEW BOARD.*

**DS DESIGN CHANGE**

*CHANGES OR CLARIFIES THE PHYSICAL DESIGN WITHIN THE SCOPE OF THE CONTRACT. COULD BE AN ADDITION OR DELETION.*

**DW DELETED WORK**

*USE WHEN DELETING CONTRACT ITEMS OF WORK.*

**EN ENVIRONMENTAL COMPLIANCE**

*PLANNED METHOD WAS CHANGED TO MAINTAIN COMPLIANCE WITH EXISTING PERMIT REQUIREMENTS*

**MO QUANTITY VARIATION**

*CHANGES THE PRICE FOR A CONTRACT ITEM WHICH HAS EXPERIENCED A QUANTITY VARIATION IN EXCESS OF 25%.*

**MR MAT'LS SPEC REVISION**

*CHANGES A MATERIALS PROPERTY SPECIFICATION, ACCEPTS NON-SPEC MATERIAL OR ALLOWS A MATERIALS SUBSTITUTION.*

**NP FEDERAL NON- PARTICIPATION**

*A DETERMINATION HAS BEEN MADE THAT WE WILL NOT USE FEDERAL FUNDS ON THIS ITEM OF WORK.*

**OC OMISSION IN CONTRACT PROVISIONS**

*INITIATED TO CORRECT AN OMISSION IN THE CONTRACT PROVISION*

**OP OMISSION IN THE PLANS**

*INITIATED TO CORRECT AN OMISSION IN THE PLANS*

**OR OTHER SPEC REVISION**

*CHANGES A PROVISION OTHER THAN MATERIALS*

**RG MODIFIES A REGION SPECIFICATION**

*MODIFIES A REGION GSP OR SPECIAL PROVISION*

**RS REVISED SCOPE**

*ADDS WORK TO OR DELETES WORK FROM THE ORIGINAL SCOPE AND/OR INTENT OF THE CONTRACT.*

**SA SCHEDULE ADJUSTMENT**

*CHANGES THE DURATION FOR ALL OR PART OF THE CONTRACT.*

**THE WSDOT CONSTRUCTION CHANGE ORDER PROCESS**

**SU DESIGN SURVEY OR BASE MAP ERROR**

*INITIATED TO PAY FOR EXTRA COSTS RESULTING FROM CONTRACTING AGENCY SURVEY OR BASE MAP ERROR*

**UP UTILITY PLAN ERRORS**

*INITIATED TO CORRECT OMISSION OR CONFLICT ON PLANS RELATED TO UTILITIES*

**VI RESOLVES A TITLE VI ISSUE**

*A CONTRACT CHANGE REQUIRED TO ADDRESS A TITLE VI ISSUE (EQUAL EMPLOYMENT OPPORTUNITY, FEDERAL TRAINING, AMERICANS WITH DISABILITIES, ETC.)*

**WM WORK METHOD CHANGE**

*CHANGES A SPECIFIC METHOD REQUIRED BY THE CONTRACT*

# THE WSDOT CONSTRUCTION CHANGE ORDER PROCESS

CHANGE ORDER — CHECKLIST			
Cont. #: _____		Cont. Title: _____	
Change Order #: _____		C.O. Title: _____	
			If Yes, State Construction Office Approval Required
<b>I. Executed by the State Construction Office</b>			
1.	A cost or credit equal to or exceeding \$500,000.*1	<input type="checkbox"/>	<input type="checkbox"/>
2.	A change in the contract documents beyond the scope, intent, or termini of the original contract.*2	<input type="checkbox"/>	<input type="checkbox"/>
3.	Any proposed revision or deletion of work that affects the condition of award requirements.	<input type="checkbox"/>	<input type="checkbox"/>
<b>II. Executed by the Region</b>			
4.	A cost or credit greater than \$100,000 but less than \$500,000. *1	<input type="checkbox"/>	<input type="checkbox"/>
5.	A change in contract time greater than 10 and less than or equal to 30 working days must be related to changes implemented by change order.	<input type="checkbox"/>	<input type="checkbox"/>
6.	A change in contract time greater than 30 working days or a change in contract time unrelated to any change order.	<input type="checkbox"/>	<input type="checkbox"/>
<b>III. Executed by the PE</b>			
7.	A determination of impacts and/or overhead.	<input type="checkbox"/>	<input type="checkbox"/>
8.	Specification change, involving Headquarters generated specifications. (Includes Region Generated specification requiring State Construction Office Approval)	<input type="checkbox"/>	<input type="checkbox"/>
9.	Specification change, involving Region generated specifications.	<input type="checkbox"/>	<input type="checkbox"/>
10.	Material or product substitution.	<input type="checkbox"/>	<input type="checkbox"/>
11.	A structural design change in the roadway section. (Requires State Materials Lab approval)	<input type="checkbox"/>	<input type="checkbox"/>
12.	A determination of changed condition. (Section 1-04.7 of the <i>Standard Specifications</i> )	<input type="checkbox"/>	<input type="checkbox"/>
13.	Settlement of a claim submitted (Section 1-09.11(2) of the <i>Standard Specifications</i> )	<input type="checkbox"/>	<input type="checkbox"/>
14.	Repair of damage regarding "acts of God" or "acts of the public enemy or of government authorities". (Section 1-07.13 of the <i>Standard Specifications</i> )	<input type="checkbox"/>	<input type="checkbox"/>
15.	A structural change for structures (see BTA authority as shown in the Construction Manual).	<input type="checkbox"/>	<input type="checkbox"/>

## Approvals Obtained:

Project Engineer (Required): \_\_\_\_\_ Date: \_\_\_\_\_

Region (Required if yes marked): \_\_\_\_\_ Date: \_\_\_\_\_

State Construction Office: \_\_\_\_\_ Date: \_\_\_\_\_

State Materials Lab: \_\_\_\_\_ Date: \_\_\_\_\_

Other (Local Agency, FHWA, Surety, etc.): \_\_\_\_\_ Date: \_\_\_\_\_

## To be completed by Project Engineer:

CO Reason (s) (see CCIS "Browse Reasons" or HQ Const. SharePoint): \_\_\_\_\_

Change order prepared by: \_\_\_\_\_ Date: \_\_\_\_\_

Has change been entered in lessons learned? Yes \_\_\_ No \_\_\_

Has design documentation been updated: Yes \_\_\_ No \_\_\_

## To be completed by Region:

Is the change eligible for Federal participation where applicable? Yes \_\_\_ No \_\_\_

Change order reviewed by: \_\_\_\_\_ Date: \_\_\_\_\_

\*1 Change greater than \$200,000 on Federal Stewardship requires FHWA approval (see Ch. 1-2.4C(3) and Ch. 1-3.4).

\*2 Per RCW 47.28.050, any change beyond \$7,500 that is beyond the original scope shall go through the competitive bidding process.

This form represents the minimum information required by State Construction. If you wish to supplement this information, you may do so on a separate sheet of paper.

Figure 1-5